RECEIVED
CENTRAL FAX CENTER
DEC 2 0 2006

REMARKS

According to the Office Action, Claims 1-68 are pending in the current application. Applicants have amended claims 57 and 58 from use claims to method claims to conform with United States patent practice. The amendments to claims 57 and 58 do not add any new matter.

The Examiner has alleged that the claims are directed to distinct inventions, and has therefore requested that the Applicants restrict the claims to one of the following groups:

Group I. Claims 1-12, 14-44, 51-53, 57-58, are drawn to a tissue protective cytokine, classified in Class 530, subclass 351.

Group II. Claims 45-50, are drawn to a nucleic acid, a vector, and a host cell, classified in Class 536, subclass 23.51.

Group III. Claims 54-56, are drawn to a method of treatment by administering a tissue protective cytokine in vitro, classified in Class 435, subclass 7.1.

Group IV. Claims 54-56, are drawn to a method of treatment by administering a tissue protective cytokine in vivo, classified in Class 424, subclass 85.1.

Group V. Claims 59-62, are drawn to a method of facilitating the transcytosis of a molecule by administering the molecule with a tissue protective cytokine, classified in Class 424, subclass 85.1.

Group VI. Claims 66-68, are drawn to a recombinant tissue protective cytokine in association with another molecule, classified in Class 530, subclass 402.

Group VII. Claim 13, is drawn to a recombinant tissue protective cytokine responsive cell, classified in Class 435, subclass 325.

Applicants have amended claims 57 and 58 from use claims to method claims and therefore believe that the newly amended claims should be contained within group IV. Applicants hereby restrict, with traverse, the claims to the revised group IV.

Additionally, The Examiner has indicated that the claims are directed to patentably distinct species as well. Specifically, the Examiner has indicated:

(a) Claim 1 is generic, and the applicant needs to elect one species of tissue

protective cytokine polypeptide selected from: (i) any one substitution of an amino acid at a particular amino acid in **SEQ ID** NO:10; and (ii) any one deletion of an amino acid in **SEQ ID** NO:10.

(b) Claims 1-6 are generic, and the Applicants need to elect one species of cell selected from: (i) photoreceptor; (ii) ganglion; (iii) bipolar; (iv) horizontal; (v) amacrine; (vi) Müeller; (vii) myocardium; (viii) pace maker; (ix) sinoatrial node; (x) sinus node; (xi) atrioventricular node; (xii) bundle of His; (xiii) hepatocyte; (xiv) stellate; (xv) Kupffer; (xvi) mesangial; (xvii) goblet; (xviii) intestinal gland; (xix) enteral endocrine; (xx) glomerulosa; (xxi) fasciculate; (xxii) reticularis; (xxiii) chromaffin; (xxiv) pericyte; (xxv) Leydig; (xxvi) Sertoli; (xxvii) sperm; (xxviii) Graffian follicles; (xxix) primordial follicles; (xxx) endometrial stroma; and (xxxi)endometrial cell.

(c) Claims 1-6 are generic, and the Applicants need to elect one species of tissue protective cytokine polypeptide selected from: (i) a cytokine having a reduced number or no sialic acid moieties; (ii) a cytokine having a reduced number or no N-linked or O-linked carbohydrates; (iii) a cytokine having at least a reduced carbohydrate content by virtue of treatment of native cytokine with at least one glycosidase; (iv) a cytokine having at least one or more oxidized carbohydrates; (v) a cytokine having at least one or more oxidized carbohydrates and is chemically reduced; (vi) a cytokine having at least one or more modified arginine residues; (vii) a cytokine having at least one or more modified lysine residues or a modification of the N-terminal amino group of a cytokine molecule; (viii) a cytokine having at least a modified tyrosine residue; (xi) a cytokine having at least a modified aspartic acid or glutamic acid residue; (xii) a cytokine having at a modified tryptophan residue; (xiii) a cytokine having at least one amino acid group removed; (xiv) a cytokine having at least one opening of at least one of the cystine linkages in the cytokine molecule; (xv) a truncated cytokine; (xvi) a cytokine having at least one polyethylene glycol molecule attached; (xvii) a cytokine having at least one fatty acid attached; (xviii) a cytokine having a non-mammalian glycosylation pattern by virtue of the expression of a recombinant cytokine in non-

mammalian cells; and (xix) a cytokine having at least one histidine tagged amino acid to facilitate purification.

(d) Claims 1-6 are generic and the Applicants need to elect one species of endothelial cell barrier selected from: (i) blood-brain barrier; (ii) blood-eye barrier; (iii) blood testes barrier; (iv) blood-ovary barrier; and (v) blood-uterus barrier.

(e) Claims 1-6 are generic and the Applicants need to elect one species of cell selected from: (i) neuronal; (ii) muscle; (iii) heart; (iv) lung; (v) liver; (vi) kidney; (vii) small intestine; (viii) adrenal cortex; (ix) adrenal medulla; (x) capillary; (xi) endothelial; (xii) testis; (xiii) ovary; (xiv) endometrial; or (xv) stem cell.

(f) Claims 1-6 are generic and the Applicants need to elect one species of tissue protective cytokine selected from: (i) asialoerythropoietin; (ii) hyposialyated erythropoietin; (iii) hypersialylated erythropoietin; (iv) periodate-oxidized erythropoietin; (v) R-glyoxal erythropoietin; (vi) phenylglyoxal-erythropoietin; (vii) erythropoietin in which arginine is modified with 2,3-butanedione; (viii) erythropoietin in which arginine is modified with cyclohexadione; (ix) erythropoietin in which arginine is modified with 3-deoxyglucosone; (x) glucitolyl lysine erythropoietin; (xi) fructosyl lysine erythropoietin; (xii) alpha-N-carbamoylerythropoietin; (xiii) N-epsilon-carbamoyl erythropoietin; (xiv) alpha-N-carbamoyl, N-epsilon-carbamoyl erythropoietin; (xv) alpha-N-carbamoylasialoerythropoietin; (xvi) N-epsilon-crbamoylasialoerythropoietin; (xvii) alpha-N-carbamoyl, N-epsilon-carbamoylasialoerythropoietin; (xviii) alpha-N-carbamoylhyposialoerythropoietin; (xix) N-epsilon-carbamoylhyposialoerythropoietin; (xx) alpha-N-carbamoyl, N-epsilon-carbamoylhyposialoerythropoietin; (xxi) alpha-N-acetylerythropoietin; (xxii) N-epsilon-acetylerythropoietin; (xxiii) alpha-N-acetyl, N-epsilon-acetylerythropoietin; (xxiv) alpha-N-acetylasialoerytropoietin; (xxv) N-epsilon-acetylasialoerythropoietin; (xxvi) alpha-N-acetyl, N-epsilon-acetylasialoerythropoietin; (xxvii) alpha-N-acetylhyposialoerythropoietin; (xxviii) alpha-N-acetyl, N-epsilon-acetylhyposialoerythropoietin; (xxix) alpha-N-

succinylerythropoietin; (xxx) N-epsilon-succinylerythropoietin; (xxxi) alpha-N-succinyl, N-epsilon-succinylerythropoietin; (xxxii) alpha-N-succinylasialoerythropoietin; (xxxiii) N-epsilon-succinylasialoerythropoietin; (xxxiv) alpha-N-succinyl, N-epsilon-succinylasialoerythropoietin; (xxxv) alpha-N-succinylhyposialoerythropoietin; (xxxvi) N-epsilon-succinylhyposialoerythropoietin; (xxxvii) alpha-N-succinyl, N-epsilon-succinylhyposialoerythropoietin; (xxxiii)erythropoietin modified at a lysine residue; (xxxviii) erythropoietin modified at a aspartic acid residue; (xxxix) erythropoietin modified at a glutamic acid residue; or (xl) N-epsilon-acetylhyposialoerythropoietin.

(g) Claims 1-6 are generic and the Applicants need to elect one species of activity selected from: (i) increasing hematocrit; (ii) vasoactive action; (iii) hyperactivating platelets; (iv) pro-coagulant activities; and (v) increasing production of thrombocytes,

(h) Claims 1-6 are generic and the Applicants need to elect one species of injury selected from: (i) a seizure disorder; (ii) multiple sclerosis; (iii) stroke; (iv) hypotension; (v) cardiac arrest; (vi) ischemia; (vii) myocardial infarction; (viii) inflammation; (ix) age-related loss of cognitive function; (x) radiation damage; (xi) cerebral palsy; (xii) neurodegenerative disease; (xiii) Alzheimer's disease; (xiv) Parkinson's disease; (xv) Leigh disease; (xvi) AIDS; (xvii) memory loss; (xviii) amyotrophic lateral sclerosis; (xix) alcoholism; (xx) mood disorder; (xxi) anxiety disorder; (xxii) attention deficit disorder; (xxiii) autism; (xxiv) Creutzfeld-Jakob disease; (xxv) brain or spinal cord trauma; (xxvi) brain or spinal cord ischemia; (xxvii) heart-lung bypass; (xxviii) chronic heart failure; (xxix) macular degeneration; (xxx)diabetic neuropathy; (xxxi) diabetic retinopathy; (xxxii) glaucoma; (xxxiii) retinal ischemia; (xxxiv) retinal trauma; or (xxxv) dementia.

(i) Claims 1-6 are generic and the Applicants need to elect one species of molecule selected from: (i) receptor agonist; (ii) receptor antagonist; (iii) hormone; (iv) a

neurotrophic factor; (v) an antimicrobial agent; (vi) a radiopharmaceutical; (vii) an antisense oligonucleotide; (viii) an antibody; (ix) an immunosuppressant; (x) a dye; (xi) a marker; or (xii) an anti-cancer drug.

Applicants hereby make the following elections, with traverse:

With regard to the election (a), Applicants elect the tissue protective cytokine polypeptide defined by SEQ ID NO: 10 (SEQ ID NO: 62) as the species of tissue protective cytokine polypeptide. Claims 1, 2, 4, 7-53, 56-68 read thereon.

With regard to the election (b), Applicants elect ganglion as the species of cell. Claims 1-68 read thereon.

With regard to election (c), Applicants elect (vii) a cytokine having at least one or more modified lysine residues or a modification of the N-terminal amino group of a cytokine molecule as the species of tissue protective cytokine polypeptide. Claims 7, 8, 16, and 31-41, read thereon.

With regard to the election (d), Applicants elect (ii) blood-eye barrier as the species of endothelial cell barrier. Claims 14, 15, and 59-68 read thereon.

With regards to the election (e), Applicants elect (i) neuronal as the species of cells. Claims 1-68 read thereon.

With regards to the election (f), Applicants elect (xiv) alpha-N-carbamoyl, N-epsilon-carbamoyl erythropoietin as the species of tissue protective cytokine. Claims 16 and 33-34 read thereon.

With regards to the election (g), Applicants elect (i) increasing hematocrit as the species of activity. Claims 1-53 and 56-68 read thereon.

With regards to the election (h), Applicants elect (xxxiii) retinal ischemia as the species of injury. Claims 57-58 read thereon.

With regards to the election (i), Applicants elect (iv) a neurotrophic factor as the species of molecule. Claims 59-68 read thereon.

RECEIVED
CENTRAL FAX CENTER
DEC 2 0 2006

CONCLUSION

Entry of the foregoing remarks and amendment into the record of the above-identified application is respectfully requested. Entry of the foregoing remarks is respectfully requested. The fee of $2160 for a five month extension of time is enclosed herewith. No other fees are believed to be necessitated by the foregoing response.

Respectfully submitted,

Date: December 20, 2006

By: _____ 42,623
Frederick J. Hamble (Reg. No.)

712 Kitchawan Road
Ossining, NY 10562
(914) 762-7586